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### REMARKS / DISCUSSION OF ISSUES

Claims 1-29 are pending in the application.

The applicants thank the Examiner for acknowledging the claim for priority and receipt of certified copies of all the priority documents.

The Examiner is respectfully requested to state whether the drawings are acceptable.

The applicants thank the Examiner for providing information about recommended section headings in the specification. However, the applicants respectfully decline to add section headings, as they are not required in accordance with MPEP 608.01(a).

Claims are amended for non-statutory reasons: to correct one or more informalities, remove figure label numbers, and/or to replace European-style claim phraseology with American-style claim language. The claims are not narrowed in scope and no new matter is added.

The Office action objects to the claims, and rejects claims 1, 3, 4, 16, 17, and 29 under 35 U.S.C. 112, second paragraph. The applicants believe that the aforementioned amendment to the claims have also addressed the Office action's objections and rejection, and respectfully request the Examiner's reconsideration of these objections and rejection.

The Office action rejects claims 1-23 and 25-29 under 35 U.S.C. 103(a) over Nagai (USP 6,011,355) and Yao et al. (USP 5,844,373, hereinafter Yao). The applicants respectfully traverse this rejection. The Office action also includes claim 24 in the remarks regarding the rejection, and thus the applicants assume that claims 1-29 are rejected over Nagai and Yao.

Claim 1, upon which claims 2-13 depend, claims a circuit arrangement for an AC voltage supply of a plasma display panel, that includes a plasma cell within a transistor bridge, a DC voltage converter that provides an auxiliary charging voltage,

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and a charging current circuit that receives the auxiliary charging voltage and provides charging current to the capacitor of the plasma cell. Claim 14, upon which claims 15-28 depend, and claim 29 contain a similar limitation.

Conventional plasma voltage supplies, such as taught by Nagai, do not use an auxiliary voltage supply to provide the charging current to the plasma cells. The Office action acknowledges that "Nagai does not mention the charging current circuit being supplied with an auxiliary charging current" (Office action, page 5, last sentence).

The Office action asserts that because Yao teaches a DC voltage converter, one of ordinary skill in the art would be lead to couple the output of Yao's voltage converter to Nagai to achieve the applicants' claimed invention. The applicants respectfully disagree with this assertion.

The Examiner's attention is requested to MPEP 2143, wherein it is stated:

"THE PRIOR ART MUST SUGGEST THE DESIRABILITY OF THE CLAIMED INVENTION ... The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicants' disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). ... The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)".

Neither Nagai nor Yao teaches or suggests an auxiliary voltage supply to provide the charging current to plasma cells. Nagai addresses the same problem as the applicants, and arrives at a substantially different solution (see Nagai's FIG. 1). Nagai modifies the charging and discharging paths so as to avoid the charging inductor during select time periods to increase or decrease the voltage on the charging/discharging capacitor (Nagai, column 7, lines 3-18; see the asymmetric current waveforms at FIGs. 12(b) and (c)). Nagai does not teach or suggest directly modifying the voltage on the charging/discharging capacitor via the use of an auxiliary voltage supply.

The Office action asserts that one of ordinary skill in the art would have been motivated to use Yao's power supply in the circuit arrangement of Nagai "for the

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purpose of generating a steady and smooth direct current voltage", citing Yao, column 5, lines 25-26. This assertion is flawed for a variety of reasons.

The cited text of Yao is provided after describing the operation of a diode, transistor, coil, and capacitor arrangement for creating a DC voltage. There is no suggestion in this statement that the resultant DC voltage should be used as an auxiliary voltage to provide charging current to plasma cells.

Further, Nagai's circuit 2 is configured to provide "a steady and smooth direct current voltage" on capacitor 21. One of ordinary skill in the art would not be motivated by Yao's teaching of providing a steady and smooth direct current voltage to modify Nagai so as to create the applicants' claimed invention, because Nagai's circuit adequately provides a steady and smooth direct current voltage.

MPEP 2143 also states:

"THE PROPOSED MODIFICATION CANNOT RENDER THE PRIOR ART UNSATISFACTORY FOR ITS INTENDED PURPOSE

If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification."

The Office action suggests modifying "the circuit arrangement of Nagai by connecting the [Yao's] voltages  $V_w$  and  $V_a$  [respectively] to the source electrode of element 22a and 22b of Nagai" (Office action, page 6, lines 6-7). The applicants respectfully maintain that the proposed modification will render the modified circuit of Nagai inoperable for its intended function. Nagai's circuit 2 operates by maintaining the voltage at the source electrodes of elements 22a and 22b essentially constant at half the input voltage. Yao specifically teaches that  $V_w$  is generated to be three times the value of  $V_a$ ; applying such an unbalanced set of voltages to Nagai's elements 22a and 22b will have unpredictable consequences, and will not result in a usable plasma display.

Because neither Nagai nor Yao, individually or collectively, teaches or suggests an auxiliary voltage supply to provide the charging current to plasma cells, and because Nagai addresses the same problem as the applicants, and arrives at a substantially different solution, and because the proposed combination of Nagai and

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Yao would not be operable for its intended function, the applicants respectfully maintain that the rejection of claims 1-29 under 35 U.S.C. 103(a) over Nagai and Yao is unfounded, per MPEP 2143.

The Office action rejects claim 3 and 10-12 under 35 U.S.C. 103(a) over Nagai, Yao, and Breunig et al. (USPA 2001/0023488). The applicants respectfully traverse this rejection, based on the remarks above regarding claim 1 and Nagai and Yao.

In view of the foregoing, the applicants respectfully request that the Examiner withdraw the rejections of record, allow all the pending claims, and find the application to be in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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